

1/9

ATGGCGGCGG CCGTCCTGCT GGGACTGAGC TGGCTCTGCT CTCCCCTGGG AGCTCTGGTC 60
CTGGACTTCA ACAACATCAG GAGCTCTGCT GACCTGCTTG GGGCCCGGAA GGGCTCACAG 120
TGCCTGTCTG ACACAGACTG CAATACCAGA AAGTTCTGCC TCCAGTCCCA CAATGAGAAG 180
CCGTTCTGTG CTACATGTCG TGGGTTGCAG AGGAGGTGCC AGCGAGATGC CATGTGCTGC 240
CCTGGGACAC TCTGCATGAA TGATGTTTGT ACTACGATGG AAGACGCAAC CCCAAAATTG 300
GAAAGGCAGC TTGATGAGCA AGATGGCACA CATGCAGAAG TAACAACTGG GCACCCAGTC 360
CAGGAAAACC AACCCAAGAG GAAGCCAAGT ATTAAGAAAT CACAAGGCAG GAAGGGACAA 420
GAGGGAGAAA GTTGTCTGAG AACTTTTGAC TGTGGCCCTG GACTTTGCTG TGCTCGTCAT 480
TTTTGGACGA AAATTTGTAA GCCAGTCCTT TTGGAGGGAC AGGTCTGCTC CAGGAGAGGG 540
CATAAAGACA CTGCTCAAGC TCCAGAAATC TTCCAGCGTT GCGACTGTGG CCCCGGACTA 600
CTGTGTCGAA GCCAACTGAC CAGCAATCAG CAGCATGCAC GGTTACGAGT ATGCCAAAAA 660
ATAGAAAAGC TATAA 675

FIG. 1

1 MAAVLLGLS WLCSP LGALV LDFNNIRSSA DLLGARKGSQ CLSDTDCNTR KFCLQSHNEK
61 PFCATCRGLQ RRCQRDAMCC PGTLCMNDVC TTMEDATPKL ERQLDEQDGT HAEVTTGHPV
121 QENQPKRKPS IKKSQGRKGQ EGESCLRTFD CGPGLCCARH FWTKICKPVL LEGQVCSRRG
181 HKDTAQAPEI FQRCD CGPGL LCRSQLTSNQ QHARLRVCQK IEKL

FIG. 2

2/9

	1	50
Human_Dkk-4(AF177397)	GCACGAGAGA CGACGTGCTG AGCTGCCAGC TTAGTGGAAG CTCTGCTCTG	
Cyno_Dickkopf-4	
	51	100
Human_Dkk-4(AF177397)	GGTGGAGAGC AGCCTCGCTT TGGTGACGCA CAGTGCTGGG ACCCTCCAGG	
Cyno_Dickkopf-4	
	101	150
Human_Dkk-4(AF177397)	AGCCCCGGGA TTGAAGGATG GTGGCGGCCG TCCTGCTGGG GCTGAGCTGG	
Cyno_Dickkopf-4ATG GCGGCGGCCG TCCTGCTGGG ACTGAGCTGG	
	151	200
Human_Dkk-4(AF177397)	CTCTGCTCTC CCCTGGGAGC TCTGGTCCTG GACTTCAACA ACATCAGGAG	
Cyno_Dickkopf-4	CTCTGCTCTC CCCTGGGAGC TCTGGTCCTG GACTTCAACA ACATCAGGAG	
	201	250
Human_Dkk-4(AF177397)	CTCTGCTGAC CTGCATGGGG CCCGGAAGGG CTCACAGTGC CTGTCTGACA	
Cyno_Dickkopf-4	CTCTGCTGAC CTGCTTGGGG CCCGGAAGGG CTCACAGTGC CTGTCTGACA	
	251	300
Human_Dkk-4(AF177397)	CGGACTGCAA TACCAGAAAG TTCTGCCTCC AGCCCCGCGA TGAGAAGCCG	
Cyno_Dickkopf-4	CAGACTGCAA TACCAGAAAG TTCTGCCTCC AGTCCCACAA TGAGAAGCCG	
	301	350
Human_Dkk-4(AF177397)	TTCTGTGCTA CATGTCGTGG GTTGCGGAGG AGGTGCCAGC GAGATGCCAT	
Cyno_Dickkopf-4	TTCTGTGCTA CATGTCGTGG GTTGCAAGAG AGGTGCCAGC GAGATGCCAT	
	351	400
Human_Dkk-4(AF177397)	GTGCTGCCCT GGGACACTCT GTGTGAACGA TGTTTGTACT ACGATGGAAG	
Cyno_Dickkopf-4	GTGCTGCCCT GGGACACTCT GCATGAATGA TGTTTGTACT ACGATGGAAG	
	401	450
Human_Dkk-4(AF177397)	ATGCAACCCC AATATTAGAA AGGCAGCTTG ATGAGCAAGA TGGCACACAT	
Cyno_Dickkopf-4	ACGCAACCCC AAAATTGGAA AGGCAGCTTG ATGAGCAAGA TGGCACACAT	
	451	500
Human_Dkk-4(AF177397)	GCAGAAGGAA CAACTGGGCA CCCAGTCCAG GAAAACCAAC CCAAAGGAA	
Cyno_Dickkopf-4	GCAGAAGTAA CAACTGGGCA CCCAGTCCAG GAAAACCAAC CCAAGAGGAA	

FIG.3A

3/9

	501		550
Human_Dkk-4(AF177397)	GCCAAGTATT AAGAAATCAC AAGGCAGGAA GGGACAAGAG GGAGAAAGTT		
Cyno_Dickkopf-4	GCCAAGTATT AAGAAATCAC AAGGCAGGAA GGGACAAGAG GGAGAAAGTT		
	551		600
Human_Dkk-4(AF177397)	GTCTGAGAAC TTTGACTGT GGCCCTGGAC TTTGCTGTGC TCGTCATTTT		
Cyno_Dickkopf-4	GTCTGAGAAC TTTGACTGT GGCCCTGGAC TTTGCTGTGC TCGTCATTTT		
	601		650
Human_Dkk-4(AF177397)	TGGACGAAAA TTTGTAAGCC AGTCCTTTTG GAGGGACAGG TCTGCTCCAG		
Cyno_Dickkopf-4	TGGACGAAAA TTTGTAAGCC AGTCCTTTTG GAGGGACAGG TCTGCTCCAG		
	651		700
Human_Dkk-4(AF177397)	AAGAGGGCAT AAAGACACTG CTCAAGCTCC AGAAATCTTC CAGCGTTGCG		
Cyno_Dickkopf-4	GAGAGGGCAT AAAGACACTG CTCAAGCTCC AGAAATCTTC CAGCGTTGCG		
	701		750
Human_Dkk-4(AF177397)	ACTGTGGCCC TGGACTACTG TGTCGAAGCC AATTGACCAG CAATCGGCAG		
Cyno-Dickkopf-4	ACTGTGGCCC CGGACTACTG TGTCGAAGCC AACTGACCAG CAATCAGCAG		
	751		800
Human_Dkk-4(AF177397)	CATGCTCGAT TAAGAGTATG CAAAAAATA GAAAAGCTAT AAATATTTCA		
Cyno_Dickkopf-4	CATGCACGGT TACGAGTATG CAAAAAATA GAAAAGCTAT AA		
	801		841
Human_Dkk-4(AF177397)	AAATAAAGAA GAATCCACAT TGCAAAAAAA AAAAAAAAAA A		
Cyno_Dickkopf-4		

FIG.3B

4/9

Cyno_Dickkopf-4	MAAAVLLGLS	WLCSP LGALV	LD FNNIRSSA	DLLGARKGSQ	CLSDTDCNTR
Human_Dkk4	MVA AVLLGLS	WLCSP LGALV	LD FNNIRSSA	DLHGARKGSQ	CLSDTDCNTR
Mouse_DKK4	MVLVTLLGLS	WFCSP LAALV	LD FNNIKSSA	DVQGAGKGS L	CASDRDCSEG

	51		100
Cyno_Dickkopf-4	KFCLQSHNEK	PFCATCRGLQ	RRCQRDAMCC
Human_Dkk4	KFCLQPRDEK	PFCATCRGLR	RRCQRDAMCC
Mouse_DKK4	KFCLAFHDER	SFCATCRRVR	RRCQRS AVCC

	101		150
Cyno_Dickkopf-4	ERQLDEQDGT	HA EVTTGHPV	QENQPKRKPS
Human_Dkk4	ERQLDEQDGT	HA EGT TGHPV	QENQPKRKPS
Mouse_DKK4	DRNTDGQDGA	YA EGT TKWPA	EENRPQ GKPS

	151		200
Cyno_Dickkopf-4	CGPGLCCARH	FWTKICKPVL	LEGQVCSRRG
Human_Dkk4	CGPGLCCARH	FWTKICKPVL	LEGQVCSRRG
Mouse_DKK4	CGPGLCCARH	FWTKICKPVL	REGQVCSRRG

	201		224
Cyno_Dickkopf-4	L CRSQLTSNQ	QHARLRVCQK	IEKL
Human_Dkk4	L CRSQLTSNR	QHARLRVCQK	IEKL
Mouse_DKK4	T CRSQVTSNR	QHSRLRVCQR	I...

FIG.4

5/9

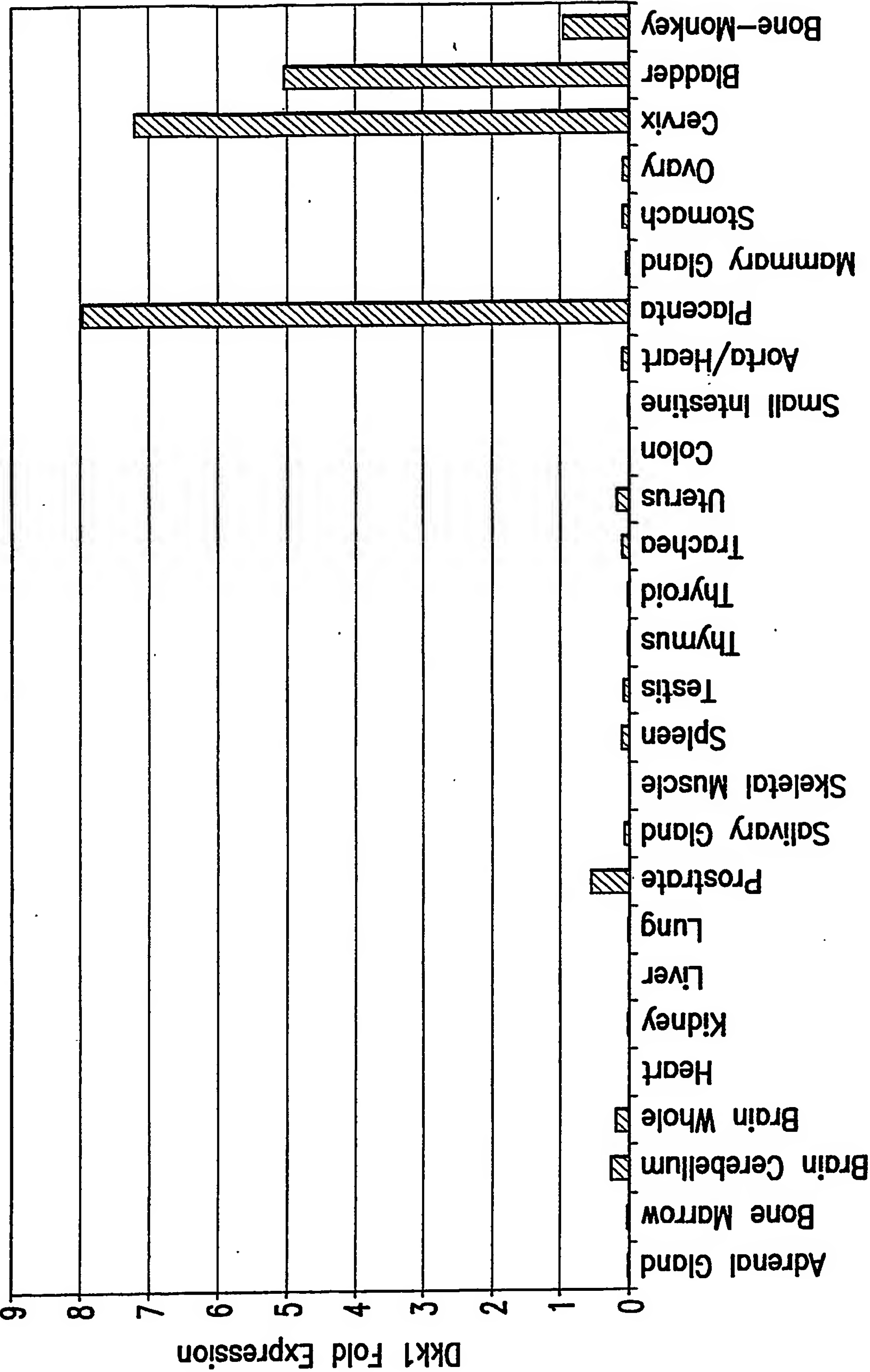


FIG. 5

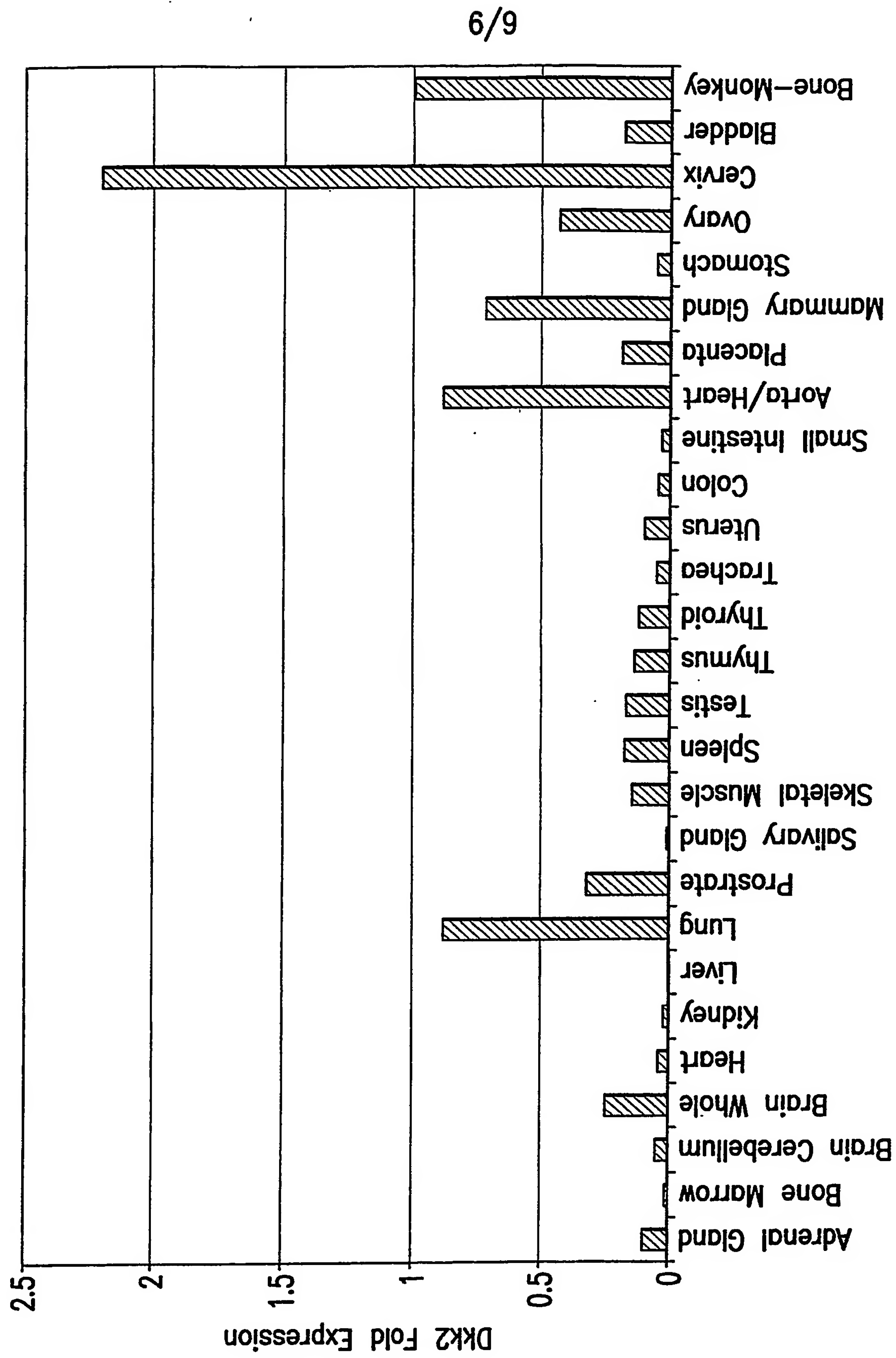


FIG.6

7/9

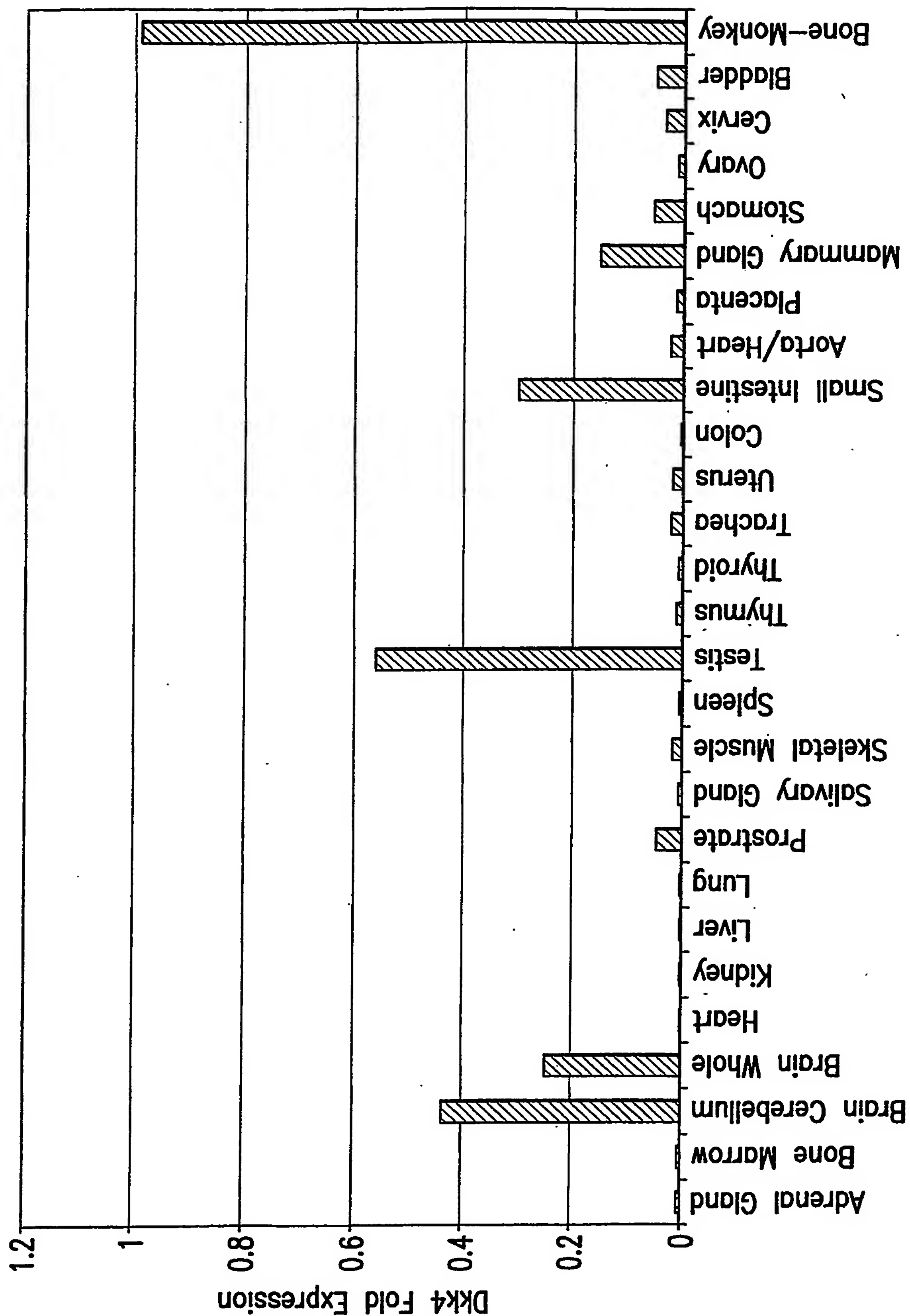


FIG. 7

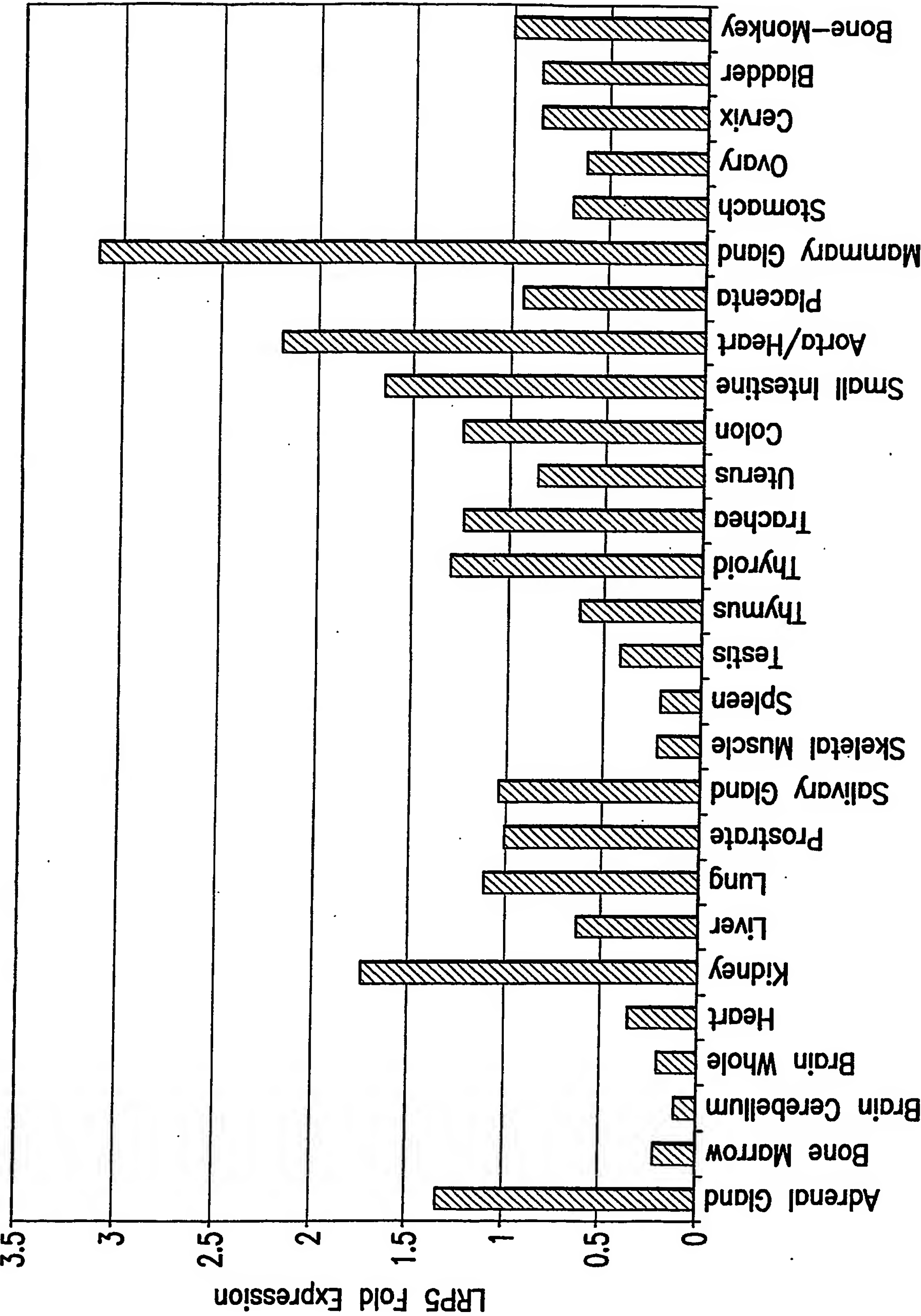


FIG. 8

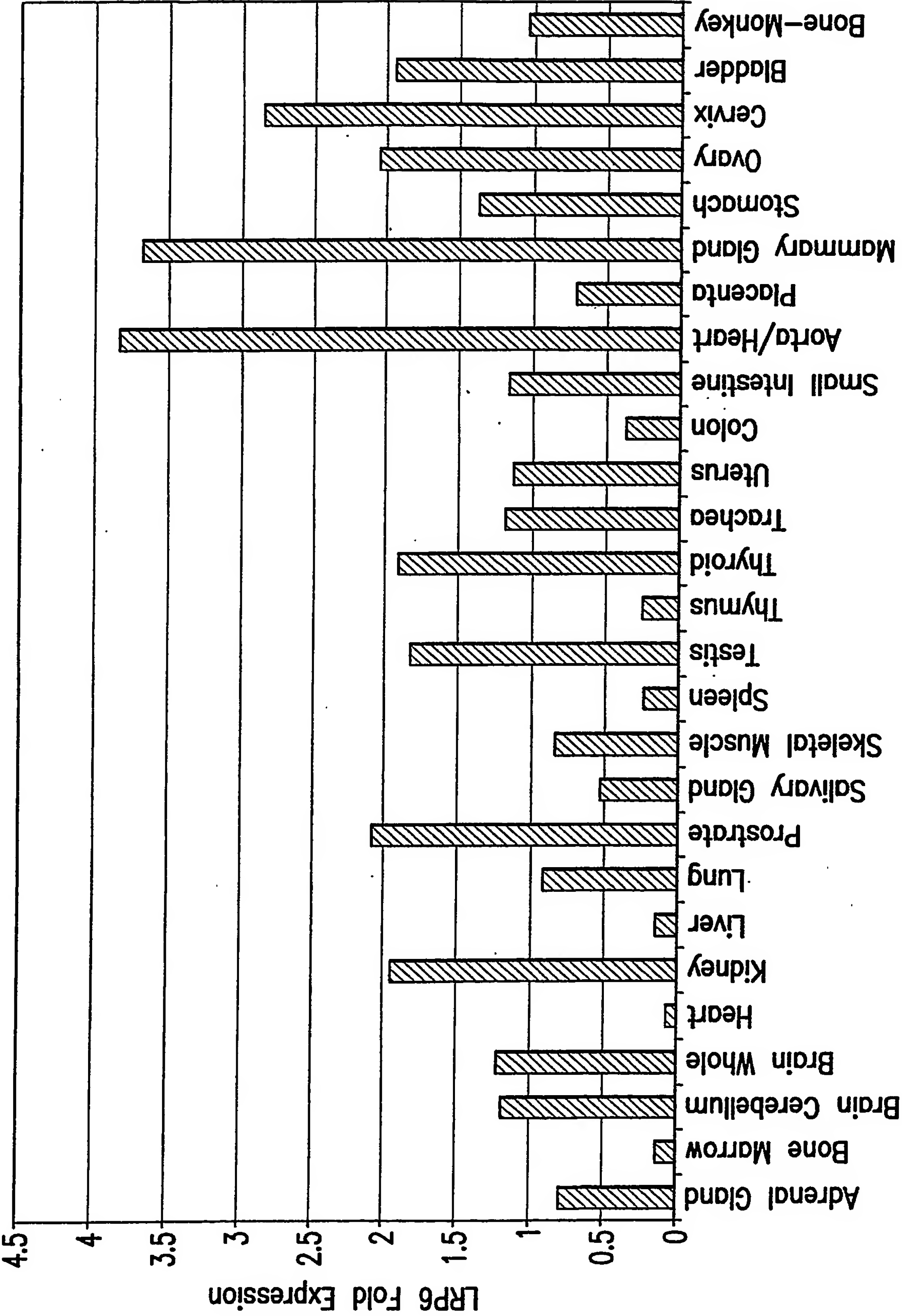


FIG. 9